

Marco Moraschini

Dipartimento di Matematica
Università di Bologna
40126 Bologna, Ufficio C4
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Personal Data

Name **Marco.**
Surname **Moraschini.**
Place of Birth **Milan (MI).**
Date of Birth **January 21, 1991.**
Webpage <https://www.dm.unibo.it/~marco.moraschini2>.
E-mail marco.moraschini2@unibo.it.
Working Address **Dipartimento di Matematica, Università di Bologna, 40126 Bologna, Ufficio C4.**

Positions and Titles

2024 present **National Scientific Habilitation for full professor.**
2023 present **National Scientific Habilitation for associate professor.**
08/03/2023 **Senior Assistant Professor (fixed-term, tenure-track position),** University of Bologna.
present
10/01/2022 **Junior Assistant Professor (fixed-term),** University of Bologna.
07/03/2023
01/01/2019 **Postdoctoral researcher,** *University of Regensburg*, Funded by SFB Higher Invariants
31/12/2021 1085, Mentor Prof. Dr. Clara Löh.
2016-2019 **Culture della Materia of Differential Geometry and Topology,** *Qualified as an expert in that subject – Teaching assistant,* Università di Pisa, Pisa.

Education

01/11/2015 **Ph.D. in Mathematics,** *Università di Pisa (Pisa),* Ottimo cum Laude, *Thesis title:*
06/12/2018 *On Gromov's theory of multicomplexes: the original approach to bounded cohomology and simplicial volume,* Advisor: Prof. Roberto Frigerio.
DOI: <https://doi.org/10.13131/unipi/etd/11242018-182437>
08/10/2013 **Master Degree,** *Università degli Studi di Milano-Bicocca (Milano),* 110/110 cum
23/07/2015 Laude, *Thesis title: Topological complexity and applications,* Advisors: Prof. Davide Luigi Ferrario and Prof. Aniceto Murillo.
24/08/2010 **Bachelor Degree,** *Università degli Studi di Milano-Bicocca (Milano),* 110/110
15/10/2013 cum Laude, *Thesis title: Weak Convergence and Wiener Measure,* Advisor: Prof. Francesco Caravenna.

Research

Research interests

- **Simplicial volume and bounded cohomology.**
- **Low dimensional topology and hyperbolic geometry.**
- **Geometric group theory.**
- **Simplicial homotopy theory.**

Preprints (submitted)

- (22) **A. Casali, M. Moraschini**, Topological volumes of certain complete affine manifolds, (<https://arxiv.org/abs/2502.06303>), (17 pages).
- (21) **K. Li, C. Löh, M. Moraschini, R. Sauer and M. Uschold**, The algebraic cheap rebuilding property, (<https://arxiv.org/abs/2409.05774>), (39 pages).
- (20) **C. Campagnolo, F. Fournier-Facio, Y. Lodha, M. Moraschini**, An algebraic criterion for the vanishing of bounded cohomology, (<https://arxiv.org/abs/2311.16259>), (62 pages).

Publications

Journal papers

- (19) **M. Moraschini, G. Raptis**, Addendum to “Amenability and acyclicity in bounded cohomology”, to appear in **Revista Matemática Iberoamericana**, (<https://ems.press/journals/rmi/articles/14298515>).
- (18) **C. Campagnolo, F. Fournier-Facio, Y. Lodha, M. Moraschini**, Displacement techniques in bounded cohomology, **manuscripta mathematica**, 176 (6) (2025), 1–26.
(<https://link.springer.com/article/10.1007/s00229-024-01604-9>)
- (17) **K. Li, C. Löh, M. Moraschini**, Bounded acyclicity and relative simplicial volume, **Journal of Topology and Analysis**, (<https://www.worldscientific.com/doi/10.1142/S1793525324500365>).
- (16) **L. Battista, S. Francaviglia, M. Moraschini, F. Sarti, A. Savini**, Bounded Co-homology Classes of Exact forms, **Proceedings of the American Mathematical Society**, 152 (2024) 71–80.
(<https://www.ams.org/journals/proc/2024-152-01/S0002-9939-2023-16505-3/>)
- (15) **M. Moraschini, G. Raptis**, Amenability and acyclicity in bounded cohomology, **Revista Matemática Iberoamericana**, 39 (6) (2023), 2371–2404.
(<https://ems.press/journals/rmi/articles/9127417>)
- (14) **F. Fournier-Facio, C. Löh, M. Moraschini**, Bounded cohomology of finitely presented groups: vanishing, non-vanishing and computability, **Annali della Scuola Normale di Pisa. Classe di Scienze**, XXIV (2) (2024), 1169–1202.
(https://doi.org/10.2422/2036-2145.202201_003)
- (13) **C. Löh, M. Moraschini, George Raptis**, On the simplicial volume and the Euler characteristic of (aspherical) manifolds, **Research in the Mathematical Sciences**, 9 (44) (2022), 1–36.
(<https://doi.org/10.1007/s40687-022-00341-3>)

- (12) **C. Löh, M. Moraschini, R. Sauer**, Amenable covers and integral foliated simplicial volume, **New York Journal of Mathematics**, 28 (2022), 1112–1136 .
(<https://nyjm.albany.edu/j/2022/28-47v.pdf>)
- (11) **F. Fournier-Facio, C. Löh, M. Moraschini**, Bounded cohomology and binate groups, **Journal of the Australian Mathematical Society**, 115 (2023), 204–239.
(<https://doi.org/10.1017/S1446788722000106>)
- (10) **C. Löh, M. Moraschini**, Topological volume of fibrations: A note on open covers, **Proceedings of the Royal Society of Edinburgh Section A: Mathematics**, 152 (5) (2022), 1340–1360.
(<https://doi.org/10.1017/prm.2021.64>)
- (9) **M. Moraschini, A. Savini**, Multiplicative constants and maximal measurable cocycles in bounded cohomology, **Ergodic Theory and Dynamical Systems**, 42 (2022), 3490–3525.
(<https://doi.org/10.1017/etds.2021.91>)
- (8) **D. Fauser, C. Löh, M. Moraschini, J. P. Quintanilha**, Stable integral simplicial volume of 3-manifolds, **Journal of Topology**, 14 (1) (2021), 608–640.
(<https://londmathsoc.onlinelibrary.wiley.com/doi/full/10.1112/topo.12193>)
- (7) **P. Capovilla, C. Löh, M. Moraschini**, Amenable category and complexity, **Algebraic and Geometric Topology**, 22 (3) (2022), 1417–1459.
(www.doi.org/10.2140/agt.2022.22.1417)
- (6) **M. Moraschini, A. Savini**, A Matsumoto-Mostow result for Zimmer’s cocycle of hyperbolic lattices, **Transformation groups**, 27 (2022), 1337–1392.
(<https://link.springer.com/article/10.1007/s00031-020-09630-z>)
- (5) **C. Löh, M. Moraschini**, Simplicial volume via normalised cycles, **Proceedings of the American Mathematical Society**, 148 (2020), 5437–5440.
(<https://www.ams.org/journals/proc/2020-148-12/S0002-9939-2020-15201-X/>)
- (4) **R. Frigerio, M. Moraschini**, Gromov’s theory of multicomplexes with applications to bounded cohomology and simplicial volume, **Memoirs of the American Mathematical Society**, 283 (1402) (2023), 1–166.
(<https://www.ams.org/books/memo/1402/>)
- (3) **R. Frigerio, M. Moraschini**, Ideal simplicial volumes of manifolds with boundary, **International Mathematics Research Notices (IMRN)**, 2021 (7) (April 2021) 5214–5260.
(<https://doi.org/10.1093/imrn/rny302>)
- (2) **R. Frigerio, M. Moraschini**, On volumes of truncated tetrahedra with constrained edge lengths, **Periodica Mathematica Hungarica**, 79 (1) (2019), 32–49.
(<https://link.springer.com/article/10.1007/s10998-018-00277-8>)
- (1) **M. Moraschini, A. Murillo**, Abstract sectional category in model structures on topological spaces, **Topology and its Applications**, 199 (2016), 23–31.
(<https://www.sciencedirect.com/science/article/pii/S0166864115005179>)

Reports

- (1) **M. Moraschini**, Stable integral simplicial volume of 3-manifolds, **Oberwolfach Reports**, 17 (1) (2020), 417–463.
(www.doi.org/10.14760/OWR-2020-7)

Book chapters

- (1) **M. Moraschini**, Gromov's Mapping Theorem via multicomplexes, Chapter in the book *Bounded Cohomology and Simplicial Volume* (**London Mathematical Society Lecture Notes Series**), 3–20, (<https://www.cambridge.org/it/academic/subjects/mathematics/geometry-and-topology/bounded-cohomology-and-simplicial-volume?format=PB>).

Editorial work

- (1) **C. Campagnolo, F. Fournier–Facio, M. Moraschini, N. Heuer**, Bounded Cohomology and Simplicial Volume, Accepted for publication in **London Mathematical Society Lecture Note Series**.

Preprint version https://www.dm.unibo.it/~marco.moraschini2/Proceedings_IYSBC_SV.pdf

Official link <https://www.cambridge.org/it/academic/subjects/mathematics/geometry-and-topology/bounded-cohomology-and-simplicial-volume?format=PB>

Forthcoming talks

- 23-27/06/2025 **TBA, Invited speaker for a research talk**, Summer school “Groupoids from a measurable, topological and geometric perspective”, IMJ-PRG.
Paris Paris

Talks

- 19/02/2025 **Simplicial volume and aspherical manifolds**, *Differential Geometry and Topology Seminar*, University of Cambridge, Cambridge.
- 15/11/2024 **An introduction to acyclicity in bounded cohomology**, *Algebra and Geometry Roma Seminars*, University of Tor Vergata, Roma.
- 20/09/2024 **Simplicial volume and complete affine manifolds**, *Invited speaker*, LiT II (Lost in Topology), Centro di Ricerca Matematica Ennio De Giorgi.
Pisa Pisa
- 11/04/2024 **An introduction to acyclicity in bounded cohomology**, *Geometry Seminars*, University of Firenze, Firenze.
- 04/09/2023 **Simplicial volume and amenable covers**, *Invited speaker*, Congresso UMI 2023, Sezione: Topologia e Geometria Differenziale, Scuola Normale Superiore–Università di Pisa.
- 15/06/2023 **Acyclicity in bounded cohomology**, *Geometry Seminars*, Dipartimento di Matematica (University of Pisa), Pisa.
- 24/05/2023 **Simplicial volume and aspherical manifolds**, *Geometry Seminar*, ETHZ, Zürich.
Zürich Zürich
- 01/03/2023 **New computations in bounded cohomology**, *Group Theory Seminar*, Universidad Autonoma de Madrid, Madrid.
- 28/02/2023 **Simplicial volume and amenable covers**, *Seminario Antonio Giraldo y Sonia Sastre*, Universidad Politécnica de Madrid, Madrid.
- 31/01/2023 **Chern conjecture and simplicial volume**, *IYSBC-SV Seminars*, Online seminar, Regensburg.
Online Online

- 27/05/2022 **Introduzione alla coomologia limitata, parte 2**, *TGV Seminars*, University of Bologna, Bologna, Italy.
- 20/05/2022 **Introduzione alla coomologia limitata, parte 1**, *TGV Seminars*, University of Bologna, Bologna, Italy.
- 06/05/2022 **New computations in bounded cohomology**, *Online seminar on Probabilistic and Geometric Group Theory*, online seminar, Germany–Spain.
- 04/05/2022 **Simplicial volume and aspherical manifolds**, *Seminari di Geometria*, University of Pisa, Pisa, Italy.
- 08/04/2022 **Cenni di teoria geometrica dei gruppi**, *TGV Seminars*, University of Bologna, Bologna, Italy.
- 22/02/2022 **Simplicial volume and aspherical manifolds**, *Algebra and Geometry Seminars*, University of Bologna, Bologna, Italy.
- 10/02/2022 **Aspherical manifolds and simplicial volume**, *Topology and geometric group theory seminars at Ohio State University (online)*, Ohio State University, United States.
- 11/01/2022 **On the simplicial volume and Euler characteristic of (aspherical) manifolds**, *Topology seminars (online)*, Bonn Mathematical Institute, Germany.
- 07/12/2021 **Aspherical manifolds and simply(cial) thanks à vous(lume)**, *LKS*, Universität Regensburg, Regensburg, Germany.
- 30/09/2021 **Acyclicity and amenability in bounded cohomology**, *contributed talk*, DMV–ÖMG–Jahrestagung 2021, Sektion Geometrie und Topologie, Universität Passau (online), Germany.
- 02/07/2021 **Vanishing results of topological volumes via open covers**, *Invited speaker*, Real and complex manifolds. The mathematical heritage of Edoardo Vesentini, Scuola Normale Superiore, Italy.
- 04/05/2021 **LS-cat and applications**, *LKS Seminar*, Online Seminar, Regensburg, Germany.
- 11/01/2021 **Simplicial volume and Euler characteristic**, *HIOB Seminar*, Online Seminar, Regensburg, Germany.
- 02/11/2020 **Gromov’s Mapping Theorem via multicomplexes**, *IYSBC-SV*, Online Seminar, Regensburg, Germany.
- 6/10/2020 **Stable integral simplicial volume**, *Trends in Low-Dimensional Topology*, Virtual seminar organized by mathematicians from Rutgers University, Georgia Tech, North Carolina State University, Duke University, MIT, United States.
- 07/05/2020 **Simplicial volume via normalised cycles**, *LKS Seminar*, Universität Regensburg, (Online seminar), Germany.
- 29/02/2020 **Stable integral simplicial volume of 3-manifolds**, *Invited speaker*, Workshop 2020: varietà reali e complesse: geometria, topologia ed analisi armonica, Scuola Normale Superiore.
(Cancelled because of COVID-19)
- 14/02/2020 **Stable integral simplicial volume of 3-manifolds**, *Invited speaker*, Manifolds and groups, MFO (Mathematisches Forschungsinstitut Oberwolfach), Germany.

- 27/01/2020 **Volumen simplicial entero estable de 3-variedades, *Invited speaker* to the session: Topology**, V Congreso de Jóvenes Investigadores de la RSME, Universitat Jaume I, Spain.
- 31/01/2020 Castellón de la Plana
- 12/12/2019 **Stable integral simplicial volume of 3-manifolds**, *AG Topologie Seminars*, KIT Karlsruhe (Karlsruher Institut für Technologie), Germany.
- 6/12/2019 **Stable integral simplicial volume of 3-manifolds, *Invited speaker***, Bavarian Ausburg Geometry and Topology Meeting VI, Universität Augsburg, Germany.
- 23/11/2019 **On Gromov's theory of multicomplexes: the original approach to bounded cohomology and simplicial volume, *Invited speaker* as the winner of the prize "Best PhD Thesis"**, PhD Talent 2019, Lightning talk, Italy.
- Pisa
- 01/08/2019 **Ideal simplicial volume of manifolds with boundary, *Invited speaker***, Workshop Heidelberg on Bounded Cohomology, Universität Heidelberg, Germany.
- 09/07/2019 **Simplicial volume of non-compact manifolds**, *BAD (Borsisti, Assegnisti, Dottorandi) Seminars*, Mathematical Department of Bologna, Italy.
- Bologna
- 03/06/2019 **Simplicial volume and amenable covers**, *Junior Geometry and Topology Seminar*, Warwick Warwick University, U. K..
- Warwick
- 15/04/2019 **Simplicial volume and amenable coverings**, *Colloquium of the Department of Mathematics*, Mathematical Department of Milano-Bicocca, Italy.
- Milan
- 08/04/2019 **Gromov's theory of multicomplexes with applications to closed manifolds, *Invited speaker***, Workshop: Riemannian and Simplicial Volume, KIT (Karlsruher Institut für Technologie), Germany.
- Karlsruhe
- 05/02/2019 **Simplicial volume and amenable coverings, *SFB-Lectures***, Universität Regensburg, Regensburg Germany.
- Regensburg
- 22/11/2018 **Why do we care about multicomplexes?**, *Baby Geometri Seminars*, Mathematical Department of Pisa, Italy.
- Pisa
- 18/10/2018 **Una introducción al volumen simplicial ideal**, *VII Encuentro des Jóvenes Topólogos*, CRM de Barcelona, Spain.
- Barcelona
- 17/09/2018 **An introduction to ideal simplicial volume, *Invited speaker* to the session: Geometric Topology, Manifolds, and Group Actions**, Joint meeting of the Italian Mathematical Union, the Italian Society of Industrial and Applied Mathematics and the Polish Mathematical Society, University of Wrocław, Poland.
- Wrocław
- 23/05/2018 **An introduction to ideal simplicial volume**, *Oberseminar Globale Analysis*, Universität Regensburg, Germany.
- Regensburg
- 18/05/2018 **An introduction to ideal simplicial volume**, *AG Topologie Seminars*, KIT (Karlsruher Institut für Technologie), Germany.
- Karlsruhe
- 17/05/2018 **An introduction to simplicial volume**, *Geometry graduate colloquium*, ETH Zürich, Zürich Switzerland.
- Zürich
- 11/04/2018 **An introduction to ideal simplicial volume**, *Seminari di Geometria*, Mathematical Department of Pisa, Italy.
- Pisa
- 02/03/2018 **Simplicial volume: when volume becomes a topological invariant**, *Insalate di Matematica*, Mathematical Department of Milano-Bicocca, Italy.
- Milano
- 04/12/2017 **Lecture on mathematical good manners: the Gromov Norm**, *BAD (Borsisti, Assegnisti, Dottorandi) Seminars*, Mathematical Department of Bologna.
- Bologna

- 20/10/2016 **Categoría seccional abstracta en diferentes estructuras de modelo sobre los espacios topológicos**, *V Encuentro de Jóvenes Topólogos*, Italy.
Málaga
- 02/12/2015 **Topological invariants in model categories**, *Baby Geometri Seminars*, Mathematical Department of Pisa, Italy.
Pisa
- 25/06/2015 **On abstract topological complexity in model categories over topological spaces**, *InSeGTo (Interesantísimo Seminario de Geometría y Topología)*, Mathematical Department of Málaga, Spain.
Málaga
- Poster sessions and lightening talks**
- 06/09/2021 **Amenable category and simplicial volume**, *Counting problems*, Centro Polivalente, Lightening talk.
Ventotene
Italy
- 09/09/2019 **Multicomplexes, bounded cohomology and simplicial volume**, *Of coarse! Quasi-isometries and groups: rigidity and classification*, Centro Polivalente, Lightening talk.
Ventotene
Italy
- 02/07/2019 **Simplicial volume**, *Young Geometric Group Theory VIII*, Facultad de Economía y Empresa (Campus Sarriko de la UPV/EHU), Lightening talk.
Bibao
Spain
- 19/10/2018 **Volumen simplicial ideal**, *XXV Encuentro de Topología*, Poster, Spain.
Barcelona
- 12/03/2018 **Ideal simplicial volume**, *Young Geometric Group Theory VII*, Congress Center, Poster.
Les Diablerets
Switzerland
- 1-3/02/2018 **Ideal simplicial volume**, *Workshop 2018, Varietà reali e complesse: geometria, topologia e analisi armonica*, Scuola Normale Superiore, Poster.
Pisa
Italy
- 11/09/2017 **Ideal simplicial volume**, *Ventotene International Workshop 2017: Moduli Spaces*, Poster, Italy.
Ventotene
- 21/10/2016 **El volumen simplicial: una introducción**, *XXIII Encuentro de Topología*, Poster, Spain.
Málaga

PhD students

- (2) **Alberto Casali**, *November 2024–present*, PhD student at the University of Pisa, (internal supervisor: Prof. Roberto Frigerio).
- (1) **Elena Bogliolo**, *November 2023–present*, PhD student at the University of Pisa, (internal supervisor: Prof. Roberto Frigerio).

Supervised projects

- Academic year **Alberto Casali**, *Simplicial volume and affine manifolds*, Scuola Normale Superiore – 2023/2024
Pisa
Università di Pisa, Master thesis.
- Academic year **Sara Andreis**, *Varietà differenziali & Teorema di Whitney*, Università di Bologna, 2022/2023
Bologna
Bachelor thesis.

- Academic year 2022/2023
Bologna **Irene Alterini**, *Il Teorema di Whitehead*, Università di Bologna, Bachelor thesis.
- Academic year 2022/2023
Bologna **Alessandro Beneventi**, *Il lemma di Milnor–Svarc e le sue applicazioni geometriche e topologiche*, Università di Bologna, Bachelor thesis.

Academic service

- 11/07/2024-present **Member of the “Commissione paritetica” for the evaluation of the Bachelor and Master of the Department of Mathematics in Bologna**, *the committee consists of 6 people: 3 of them are either tenured researchers or professors and 3 of them are Bachelor or Master students.*

Organizational experience

- 14-16/04/2025 **Manifolds and groups in Bologna III**, *Università di Bologna*, Co-organizers: Giuseppe Bargagnati, Stefano Riolo (Università di Bologna) and Filippo Sarti (Università di Pisa), <https://math.unibo.it/en/events/manifolds-and-groups-in-bologna-2025>.
- 17-19/04/2024 **Manifolds and groups in Bologna II**, *Università di Bologna*, Co-organizers: Filippo Sarti and Stefano Riolo (Università di Bologna) and Filippo Sarti (Università di Torino), <https://math.unibo.it/en/events/non-positive-curvature-in-manifolds-and-groups>.
- 24/03/2023 **Attività INdAM: Non-positive curvature in manifolds and groups**, *Università di Bologna*, Co-organizers: Ludovico Battista, Pierluigi Contucci, Stefano Francaviglia and Stefano Riolo (Università di Bologna) e Filippo Sarti (Università di Torino), <https://matematica.unibo.it/it/eventi/udr-indam-bo-2023-03-24>.
- 22-23/03/2023 **Manifolds and groups in Bologna (GNSAGA Workshop)**, *Università di Bologna*, Co-organizers: Ludovico Battista, Stefano Francaviglia and Stefano Riolo (Università di Bologna) e Filippo Sarti (Università di Torino), <https://matematica.unibo.it/it/eventi/manifolds-and-groups-in-bologna>.
- 26/09/2022 - 30/09/2022 **Workshop: Recent Advances in Bounded Cohomology**, *Universität Regensburg*, Co-organizers: Clara Löh and George Raptis (Universität Regensburg), https://www-app.uni-regensburg.de/Fakultaeten/MAT/sfb-higher-invariants/index.php/Recent_advances_in_bounded_cohomology.
- Summer semester 2022 **International young seminar on bounded cohomology and simplicial volume**, *Online seminars on Zoom*, Co-organizers: Caterina Campagnolo (UAM Madrid), Francesco Fournier-Facio (ETH Zürich) and Clara Löh (University of Regensburg), https://www.dm.unibo.it/~marco.moraschini2/IYSBC_SV.html.
- Summer semester 2022 **Seminari di Topologia e Geometria delle Varietà (TGV)**, *Seminari presso il Dipartimento di Matematica di Bologna*, Co-organizers: Stefano Francaviglia and Stefano Riolo (UNIBO), <https://www.dm.unibo.it/~marco.moraschini2/TGV.html>.
- Winter semester 2021 **International young seminar on bounded cohomology and simplicial volume**, *Online seminars on Zoom*, Co-organizers: Caterina Campagnolo (ENS-Lyon) and Francesco Fournier-Facio (ETH Zürich), https://www.dm.unibo.it/~marco.moraschini2/IYSBC_SV.html.

- Summer semester 2021 **International young seminar on bounded cohomology and simplicial volume**, *Online seminars on Zoom*, Co-organizers: Caterina Campagnolo (ENS-Lyon) and Francesco Fournier-Facio (ETH Zürich), https://www.dm.unibo.it/~marco.moraschini2/IYSBC_SV.html.
- Winter semester 2020 **International young seminar on bounded cohomology and simplicial volume**, *Online seminars on Zoom*, Co-organizers: Caterina Campagnolo (ENS-Lyon), Francesco Fournier-Facio (ETH Zürich) and Nicolaus Heuer (University of Cambridge), https://www.dm.unibo.it/~marco.moraschini2/IYSBC_SV.html.
- 21/09/2020 - 25/09/2020 **Virtual workshop on Simplicial volumes and bounded cohomology**, *Universität Regensburg*, Co-organizers: Caterina Campagnolo (ENS-Lyon), Clara Löh (University of Regensburg) and Roberto Frigerio (University of Pisa), https://www-app.uni-regensburg.de/Fakultaeten/MAT/sfb-higher-invariants/index.php/Workshop_simvol2020.
- Summer semester 2020 **International young seminar on bounded cohomology and simplicial volume**, *Online seminars on Zoom*, Co-organizer: Caterina Campagnolo (ENS-Lyon), https://www.dm.unibo.it/~marco.moraschini2/IYSBC_SV.html.
- 01/10/2016 - 31/10/2018 **Co-organizer of Seminari dei Baby Geometri**, *Università di Pisa*, <http://people.dm.unipi.it/babygeometri/>.

Research visiting period

- 17/02/2025 - 21/02/2025 **Research period at the Department of Pure Mathematics and Mathematical Statistics (PhD F. Fournier-Facio)**.
Cambridge
- 15/01/2024 - 19/01/2024 **Research period at the Universität Regensburg (Prof. C. Löh)**.
Regensburg
- 22/05/2023 - 26/05/2023 **Research period at the FIM – ETHZ (F. Fournier-Facio)**.
Zürich
- 27/02/2023 - 02/03/2023 **Research period at the Universidad Autonoma de Madrid (PhD C. Campagnolo)**.
Madrid
- 24/02/2020 - 29/12/2020 **Research period at Univeristà di Pisa (Prof. R. Frigerio)**.
Pisa
- 10/12/2019 - 13/12/2019 **Research period at Karlsruher Instut für Technologie (Prof. R. Sauer)**.
Karlsruhe
- 09/07/2019 - 12/07/2019 **Research period at Università degli studi di Bologna (PhD A. Savini)**.
Bologna
- 14/10/2015 - 23/10/2015 **Research period at Università di Málaga (Prof. A. Murillo)**.
Málaga

25/02/2015 - Studying period for writing the master thesis funded by the Extra project (Università degli studi di Milano-Bicocca, Università di Málaga (Prof. A. Murillo).
05/07/2015
Málaga

Referee of the following journals and PhD theses

PhD theses **Domenico Marasco (Università di Pisa, 2023), Giuseppe Bargagnati (Università di Pisa, 2024) and Federica Bertolotti (Scuola Normale Superiore di Pisa, 2025).**

Journals **Algebraic and Geometric Topology, Duke Mathematical Journal, Geometric and Functional Analysis (GAFA), Journal of the Mathematical Society Japan, Journal of the École Polytechnique, Mathematical Research Letters, Mathematischen Annalen.**

Databases **zbMATH.**

Projects

17/03/2023 - **PI of GNSAGA 2023 - CUP E53C22001930001 - "Bounded cohomology and simplicial volume: new computations and applications", 3000 Euro.**
17/03/2024

10/2023 - **Member of PRIN proposal code 2022NMPLT8 - CUP J53D23003820001 - "Geometry and topology of manifolds", Italy.**
present

17/01/2023 - **Member of ERC 101077154 — DAT (PI Martino Lupini), Italy.**
present

01/01/2019 - **Member of SFB Higher Invariants 1085, Founded by DFG, Regensburg**
31/12/2021 (Germany).

01/01/2016 - **Member of GNSAGA, Founded by Indam, Italy.**
present

Prizes and grants

9 - **Oberwolfach Leibniz Graduate Students (OWLG), Grant for graduate students and recent postdocs (up to an amount of 200 euros for travel costs).**
15/02/2020

23/11/2019 **PhD thesis prize, One of the best two PhD thesis in Mathematics, Physics, Informatics and Earth Science defended during the academic year 2018/2019 at the University of Pisa.**

Scholarships and Contracts

01/01/2019 - **3-years postdoc funded by the project SFB Higher Invariants 1085, Universität**
31/12/2021 *Regensburg.*

01/01/2015 **Ph.D. Scholarship, Università di Pisa.**
31/10/2018

16/04/2018 **Teaching Support, Istituzioni di Geometria (Differential Geometry), Mathematics,**
30/06/2018 *Pisa.*

01/06/2017 **Teaching Support, Geometry I, Physics, Pisa.**
30/09/2017

20/10/2016 **Teaching Support, Geometry I, Physics, Pisa.**
20/12/2016

2015 **Scholarship for writing the master thesis abroad**, *Extra Project*, Università degli studi di Milano-Bicocca.

Teaching

Academic Year **Lecturer**, *Geometry and Algebra*, Bachelor course at the Faculty of Biomedical Engineering and Electronics Engineering , 6 ECTS.
2024/2025
First Semester

Academic Year **Lecturer together with Filippo Sarti**, *Introduction to bounded cohomology and simplicial volume*, PhD course for the PhD program in Mathematics at the Università di Bologna, 25 hours (in total).
2023/2024

Academic Year **Lecturer**, *Geometry and Algebra*, Bachelor course at the Faculty of Biomedical Engineering and Electronics Engineering , 6 ECTS.
2023/2024
First Semester

Academic Year **Lecturer**, *Geometry and Algebra*, Bachelor course at the Faculty of Biomedical Engineering and Electronics Engineering , 6 ECTS.
2022/2023
First Semester

Academic Year **Lecturer**, *Algebra and Geometry (Module 1)*, Bachelor course at the Faculty of Computer Science and Engineering (Campus of Cesena), 3 ECTS.
2021/2022
Second Semester

Winter **Co-organizer with George Raptis**, *HIOB: Aspherical manifolds*, Reading seminars for the SFB people (Regensburg).
Semester
2021/2022

Winter **Lecturer**, *Bounded cohomology and simplicial volume*, Master course at the Faculty of Mathematics (Regensburg), 6 ECTS.
Semester
2019/2020

Academic Year **Teaching Support**, *Istituzioni di Geometria (Differential Geometry)*, Mathematics, Pisa.
2016/2017
Second Semester

2017/2018 **Examination Board - Cultore della Materia**, *Geometry and Differential Topology*, Mathematics, Pisa.

Academic Year **Teaching Support**, *Geometry I*, Physics, Pisa.
2016/2017
Second Semester

Academic Year **Teaching Support**, *Geometry I*, Physics, Pisa.
2016/2017
First Semester

2016/2017 **Examination Board - Cultore della Materia**, *Geometry and Differential Topology*, Mathematics, Pisa.

Workshops, Conferences and Schools attended

19/09/2024 **LiT II (Lost in Topology)**, *Scuola Normale Superiore–Università di Pisa*, Centro di
20/09/2024 Ricerca Matematica Ennio De Giorgi, Pisa.

04/09/2023 **Congresso UMI 2023, Sezione: Topologia e Geometria Differenziale**, *Scuola Normale Superiore–Università di Pisa*.

05/09/2023

11/09/2023 **GRAZP: Groups and Rigidity Around the Zimmer Program**, *Centro Polivalente*,
16/09/2023 Venototene (Italy).

26/09/2022 **Recent advances in bounded cohomology**, *Universität Regensburg*, Regensburg
30/09/2022 (Germany).

27/06/2022 **Marc Burger's Prime**, *ETHZ*, Zürich (Switzerland).
01/07/2022

27/09/2021 **DMV–ÖMG–Jahrestagung 2021, Sektion Geometrie und Topologie**, *online*,
01/10/2021 Universität Passau (Germany).

06/09/2021 **Counting problems**, *Centro Polivalente*, Ventotene (Italy).
11/09/2021

29/06/2021 **Virtual workshop: Real and complex manifolds. The mathematical heritage
02/07/2021 of Edoardo Vesentini**, *Scuola Normale Superiore*, Pisa (Italy).

21/09/2020 **Virtual workshop: Simplicial volumes and bounded cohomology**, *Università di
25/02/2020 Regensburg*, Finanziato dal progetto Higher Invariants 1085, Regensburg (Germany).

10/02/2020 **Manifolds and groups**, *MFO (Mathematisches Forschungsinstitut Oberwolfach)*,
14/02/2020 Oberwolfach (Germany).

27/01/2020 **V Congreso de Jóvenes Investigadores de la RSME**, *Universitat Jaume I*, Castel-
31/01/20 lon de la Plana (Spain).

05/12/2019 **Bavarian Geometry and Topology Meeting VI**, *Universität Augsburg*, Augsburg
06/12/2019 (Germany).

09/09/2019 **Of coarse! Quasi-isometries and groups: rigidity and classification**, *Centro
14/09/2019 Polivalente*, Venototene (Italy).

29/07/2019 **Workshop on Bounded Cohomology**, *Mathematikon Heidelberg*, Heidelberg
02/08/2019 (Germany).

31/06/2019 **Young Geometric Group Theory VIII**, *Facultad de Economía y Empresa (Campus
05/07/2019 Sarriko de la UPV/EHU)*, Bilbao (Spain).

08/04/2019 **Workshop: Riemannian and simplicial volume**, *KIT*, Karlsruhe (Germany).
11/04/2019

21/02/2019 **Workshop su varietà reali e complesse: geometria, topologia e analisi comp-
23/02/2019 lessa**, *SNS Pisa*, Pisa (Italy).

22/01/2019 **Groups, geometries and spaces in honour of Alessandra Iozzi**, *ETH Zürich*,
25/01/2019 Zürich (Switzerland).

19/10/2018 **XXV Encuentro de Topología**, *Institut d'Estudis Catalans*, Barcelona (Spain).
20/10/2018

16/10/2018 **VII Encuentro des Jóvenes Topólogos**, *CRM de Barcelona*.
18/10/2018
Barcelona

17/09/2018 **Joint meeting of the Italian Mathematical Union, the Italian Society of Indus-
20/09/2018 trial and Applied Mathematics and the Polish Mathematical Society**, *University
of Wrocław*.

02/07/2018 **Representation varieties and geometric structures in low dimensions**, *Mathematics Institute, Warwick University*, Coventry (U.K.).

06/07/2018

03/03/2018 **Topological and Homological Methods in Group Theory**, *Faculty of Mathematics, Bielefeld University*, Bielefeld (Germany).

06/03/2018

12/03/2018 **Young Geometric Group Theory VII**, *Congress Center*, Les Diablerets (Switzerland).

16/03/2018

1/02/2018 **Workshop 2018, Varietà reali e complesse: geometria, topologia e analisi armonica**, *Scuola Normale Superiore*, Pisa (Italy).

3/02/2018

25/09/2017 **Higher Invariants: Manifolds and Groups**, *Universität Regensburg*, Regensburg (Germany).

29/09/2017

11/09/2017 **Ventotene International Workshop 2017: Moduli Spaces**, *Centro Polivalente*, Venototene (Italy).

16/09/2017

19/06/2017 **Group Actions and Cohomology in Non-Positive Curvature**, *Isaac Newton Institute*, Cambridge (U.K.).

24/06/2017

04/06/2017 **Indam Meeting: Geometric Topology in Cortona**, *Palazzone*, Cortona (Italy).

10/06/2017

20/03/2017 **Young Geometric Group Theory Meeting VI**, *Mathematical Institute*, Oxford (U.K.).

24/03/2017

21/10/2016 **XXIII Encuentro de Topología**, *Universidad de Málaga*, Málaga (Spain).

22/10/2016

18/10/2016 **V Encuentro de Jóvenes Topólogos Espanoles**, *Universidad de Málaga*, Málaga (Spain).

20/10/2016

20/06/2016 **Geometric Analysis, Metric Geometry and Topology**, *Institut Fourier*, Grenoble (France).

01/07/2016

23/05/2016 **Advanced School on Geometric Group Theory and Low-Dimensional Topology: Recent Connections and Advances**, *ICTP*, Trieste (Italy).

03/06/2016

29/06/2015 **4th Spanish Young Topologists Meeting**, *Universidad Complutense*, Madrid (Spain).

02/07/2015

Languages

Italian	Native Speaker
English	Fluent
French	Fluent
Spanish	Fluent
German	Basic